



# PROFILE AND OUTCOMES OF HEMOPERFUSION IN A PEDIATRIC TERTIARY MEDICAL CENTER: A FIVE YEAR STUDY

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## INTRODUCTION

In the past five years, there has been significant developments in the technique and clinical uses of hemoperfusion in children. However, to date, there has only been one institution who has done pediatric hemoperfusion in the country. This paper provides a profile of these patients in terms of clinical and laboratory outcomes, complications, and survival to hospital discharge.

## METHODS

A retrospective cohort using the medical records of 39 patients who were admitted from 2018 to July 2022 and who underwent hemoperfusion was done.

## RESULTS

Most of the patients were 8 years old, had normal weight, admitted for dengue severe, and had multiple organ dysfunction as indication for hemoperfusion. Mortality rate despite hemoperfusion was at 51.28% (95% CI: 35.50-66.82%). There was a significant increase in the WBC ( $p$  0.0020,  $p$  0.0065,  $p$  0.0125) and absolute neutrophil count ( $p$  0.0032,  $p$  0.0074,  $p$  0.0103) after three sessions of hemoperfusion, which supports its beneficial effect in dengue severe. No significant difference in the vital signs and vasoactive inotrope score was observed. There was a decrease in the trend of CRP and procalcitonin following the completion of the second and third HP sessions which was comparable to published reports and support the benefit of hemoperfusion. Hypotension was the only significant complication ( $p$  0.0313) documented in the study.

## CONCLUSION

The study supports the published findings that hemoperfusion had no significant effect on mortality and prognosis, but it decreases the levels of inflammatory markers, and had hypotension as a complication.

## KEYWORDS

*Hemoperfusion, Dengue Severe, Outcomes*